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## ABSTRACT

2       Fischer-Tropsch (FT) products are formed in a plant utilizing a combination of  
3       a plasma reformer reactor (9) and an FT reactor (19). Feedstocks ranging from  
4       gases such as methane and natural gas to solids such as petroleum coke and coal  
5       are plasma reformed with water and/or CO<sub>2</sub> to produce one or more of hydrogen,  
6       oils, liquid alkanes and oxygenated alkanes, oil and waxes.

7       The specific ancillary equipment, e.g., boilers (16), preheaters, condensers  
8       (22) (24), gas liquid separators (19) (25), compressors (18) (18a), etc. will be  
9       combined or omitted as needed for treatment of desired raw materials as shown by  
10      the Figures.